

Arizona's Instrument to Measure Standards (AIMS)

Grade 4

Writing, Reading, and Mathematics

Released Items

January 7, 2008

AIMS Grade 4 Released Items

As part of Superintendent Tom Horne's ongoing efforts to improve the communication of academic expectations, the Arizona Department of Education is releasing AIMS DPA Grades 3 through 8 writing, reading, and mathematics items to the public. This release is intended to provide students, parents, teachers, and the community with specific examples of the types of skills being assessed on the AIMS tests. The release begins with writing, followed by reading and mathematics, similar to the AIMS tests.

Included in this release is a previous writing prompt and directions used in the AIMS assessments. Following the writing prompt section are a reading passage, directions, and the items associated with the passage in the form of a mini-test. This passage and related items are from the 2005 and 2007 AIMS administrations. At the conclusion of the reading section, the individual items are presented again with the correct answers and statistical information about each item.

The final section consists of ten mathematics items from the 2006 and 2007 AIMS administrations in the form of a mini-test. At the conclusion of the mathematics section, the individual items are presented again with the correct answers and statistical information about each item.

The statistical information includes:

- 1) item identification number;
- 2) correct answer;
- 3) response probability (P-Value), which represents the percentage of students who answered the question correctly;
- 4) Rasch difficulty, which measures the difficulty of the item on a scale in which -3 indicates a very easy item and +3 indicates an extremely difficult item; and
- 5) performance objective that the item aligns to in the 2003 standards.

The items are reproductions of the actual items as they appeared on the AIMS tests. If you have any questions, please contact Frank Brashear, Director of Test & Item Development, at (602) 542-5031.

WRITING

WRITING

Writing

Directions:

Read the writing prompt below. Use the next page for your prewriting and planning. Then write your draft on pages 6 and 7.

One day you go to your favorite toy store. When you walk in the door, you see a sign that reads, "FREE TOYS! Any toy in the store is Free."

Write a story about what happens next.

Your writing should:

- describe the setting
- include important details
- have a beginning, a middle, and an end
- be fun for others to read

Remember to edit for spelling, grammar, punctuation, and capitalization.

Go On 

WRITING

DIRECTIONS:

Use the prewriting and planning space below for notes, lists, webs, outlines, and anything else that might help you plan your writing.

Prewriting and Planning

Go On 

DIRECTIONS:

Write your draft on the following lines. Refer to the writing prompt and your prewriting and planning space as you write your draft.

Draft

[illegible]

Go On 

[illegible]

Released 1-7-08

DIRECTIONS:

Now you are going to revise your draft. Read your draft, then use the questions in the Writer's Checklist as a guide to make your changes. Check each box if you can answer "yes" to that question.

Writer's Checklist

Are my ideas clear?

Does my writing have words that make it interesting?

Does my writing have a clear beginning, middle, and ending?

Does my writing sound right and make sense?

Did I edit for capital letters?

Did I edit for correct punctuation?

Did I edit for correct spelling?

If you left any box in the checklist blank, think about ways to make your writing better.

DIRECTIONS:

For each box you did not check, make a change on your draft. Then write your final version in your Test Book /Answer Document.



READING

Directions:**Read the passage. Then answer Numbers 1 through 10.**

LEXILE: 640L

Nothing in Common

Danita stood in the middle of the long chicken house. The afternoon sun beat down on the tin roof, and the fresh wood chips on the floor seemed to soak up the heat. She looked toward one end of the building at all the feed boxes that she had filled with feed.

"We're getting baby chicks tomorrow," Dad had said at lunch, looking at Danita and her brother. "And you know what that means for the rest of the day."

It meant a lot of work—for her. She looked toward all the empty feed boxes at the other end of the chicken house. Where was Lon? Probably gone *again* to the bathroom. Sweat ran into her eyes, and her hands hurt from gripping the bucket handles.

"If you get done early enough," Dad had told her, "you can stay overnight with your cousins in town."

Danita liked Ruth and Shelby. They were nice, but they were city girls who lived in a fancy house. Their parents owned a restaurant, so her cousins probably sat around eating French fries, drinking chocolate shakes, and playing card games.

That night, when Dad dropped Danita off at Uncle Fett's restaurant, there was only one car in the parking lot.

"Why are we stopping here?" Danita asked.

"This is where your cousins are," Dad said. He kissed her goodbye and said, "I'm sure you'll be a big help."

The restaurant door was open, but inside everything looked different. The booths and tables were pushed together along the walls, and the big, bare floor stood empty. Danita knew Uncle Fett and Aunt Myra ran a restaurant, but she didn't know about *this*.

At the far end of the room stood two mop buckets full of soapy water. Between those buckets, Ruth and Shelby were down on their knees, scrubbing the floor tiles with big hand brushes. Uncle Fett was standing on a ladder, dusting the blades of a ceiling fan. They were all working so hard that they didn't even see her.

Just then Aunt Myra came from the kitchen carrying another mop bucket. "Danita!" she said. "Are we ever glad to see you!" She smiled and waved her arm at the room. "You caught us cleaning. We have to shut down every couple of months and do this."

"I disagree. It seems more like every couple of weeks," Ruth said. She and Shelby stood up. Their jeans were wet, and their faces were streaked with sweat.

"Did you work today?" Shelby asked.

Danita nodded, but she no longer felt so sorry for herself.

Uncle Fett stepped off the ladder and came toward her. "We wanted to have this done before you got here," he said, "but it's a big job. The girls have to scrub every single tile, and they're only half done."

Every tile! Danita stared at the floor. There had to be hundreds of them—far more than there were feed troughs in the chicken house.

"Your dad says you're a good worker," Uncle Fett said. "If you don't mind giving us a hand here, we'll be done in no time."

Danita looked first at her cousins and then at her aunt and uncle. "I don't mind at all," she said, grabbing the nearest brush.


She meant what she said. Helping such hard workers was an honor.

1. What is the main problem in "Nothing in Common"?

- A** Danita feels sorry for herself.
- B** Danita has to take care of the chicks.
- C** Danita wants to live with her cousins.
- D** Danita wants to drink chocolate shakes.

2. Which event changed Danita's opinion of her life?

- A** She saw all the tiles that her cousins had to clean.
- B** She asked her dad about stopping at the restaurant.
- C** She looked for her brother to help feed the chickens.
- D** She thought about her aunt and uncle owning a restaurant.

Go On 

- 3.** What is a synonym for the word scrub?
- A** build
 - B** clean
 - C** plant
 - D** wrap
- 4.** In “Nothing in Common,” who thought that helping hard workers was an honor?
- A** Dad
 - B** Ruth
 - C** Danita
 - D** Shelby
- 5.** Adding dis- to the word agree makes a new word that means
- A** agree with
 - B** agree before
 - C** cause to agree
 - D** opposite of agree

6. Who is the major character in “Nothing in Common”?

- A** Dad
- B** Danita
- C** Ruth
- D** Shelby

7. How did Danita help Ruth and Shelby?

- A** She held the ladder.
- B** She pushed the tables.
- C** She scrubbed the floor.
- D** She dusted the ceiling fans.

8. Where did Danita help Ruth and Shelby?

- A** in the bathroom
- B** in the restaurant
- C** in the parking lot
- D** in the chicken house

Go On 

- 9.** Which sentence tells the reader about Danita at the end of the passage?
- A** She didn't like eating chicken.
 - B** She didn't want to help her father.
 - C** She didn't want to play card games.
 - D** She didn't mind helping her cousins.
- 10.** What did Danita think about her cousins at the end of "Nothing In Common"?
- A** She thought that they were spoiled.
 - B** She thought that they did not work.
 - C** She thought that they liked chickens.
 - D** She thought that they were hard workers.



AIMS Grade 4 Released Items

Item	Reading Item Data							
1	Item Number	3300910	Correct Answer	A	P-Value	.56	Equated Rasch Value	0.8043
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 1							
	<p>What is the main problem in “Nothing in Common”?</p> <p>A Danita feels sorry for herself.</p> <p>B Danita has to take care of the chicks.</p> <p>C Danita wants to live with her cousins.</p> <p>D Danita wants to drink chocolate shakes.</p>							
2	Reading Item Data							
	Item Number	3300906	Correct Answer	A	P-Value	.64	Equated Rasch Value	0.3276
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 2							
3	Reading Item Data							
	Item Number	3300904	Correct Answer	B	P-Value	.83	Equated Rasch Value	-0.9677
	2003 Reading Standard Alignment is Strand 1 – Concept 4 – Performance Objective 6							
3	<p>What is a synonym for the word <u>scrub</u>?</p> <p>A build</p> <p>B clean</p> <p>C plant</p> <p>D wrap</p>							

AIMS Grade 4 Released Items

4	Reading Item Data							
	Item Number	3300915	Correct Answer	C	P-Value	.70	Equated Rasch Value	-0.0116
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 5							
In “Nothing in Common,” who thought that helping hard workers was an honor?								
A Dad								
B Ruth								
C Danita								
D Shelby								
Item	Reading Item Data							
5	Reading Item Data							
	Item Number	3300905	Correct Answer	D	P-Value	.78	Equated Rasch Value	-0.6130
	2003 Reading Standard Alignment is Strand 1 – Concept 4 – Performance Objective 1							
Adding <u>dis-</u> to the word <u>agree</u> makes a new word that means								
A agree with								
B agree before								
C cause to agree								
D opposite of agree								
6	Reading Item Data							
	Item Number	3300914	Correct Answer	B	P-Value	.78	Equated Rasch Value	-0.6371
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 4							
Who is the major character in “Nothing in Common”?								
A Dad								
B Danita								
C Ruth								
D Shelby								

AIMS Grade 4 Released Items

7	Reading Item Data							
	Item Number	3300911	Correct Answer	C	P-Value	.76	Equated Rasch Value	-0.4435
	2003 Reading Standard Alignment is Strand 1 – Concept 6 – Performance Objective 6							
<p>How did Danita help Ruth and Shelby?</p> <p>A She held the ladder.</p> <p>B She pushed the tables.</p> <p>C She scrubbed the floor.</p> <p>D She dusted the ceiling fans.</p>								
8	Reading Item Data							
	Item Number	3300918	Correct Answer	B	P-Value	.72	Equated Rasch Value	-0.1631
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 7							
<p>Where did Danita help Ruth and Shelby?</p> <p>A in the bathroom</p> <p>B in the restaurant</p> <p>C in the parking lot</p> <p>D in the chicken house</p>								
9	Reading Item Data							
	Item Number	3300916	Correct Answer	D	P-Value	.81	Equated Rasch Value	-0.8432
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 5							
<p>Which sentence tells the reader about Danita at the end of the passage?</p> <p>A She didn't like eating chicken.</p> <p>B She didn't want to help her father.</p> <p>C She didn't want to play card games.</p> <p>D She didn't mind helping her cousins.</p>								

AIMS Grade 4 Released Items

10	Reading Item Data							
	Item Number	3300909	Correct Answer	D	P-Value	.75	Equated Rasch Value	-0.4038
	2003 Reading Standard Alignment is Strand 1 – Concept 6 – Performance Objective 6							

What did Danita think about her cousins at the end of “Nothing In Common”?

A She thought that they were spoiled.

B She thought that they did not work.

C She thought that they liked chickens.

D She thought that they were hard workers.

MATHEMATICS

Mathematics

DIRECTIONS: Read each question and choose the best answer.

1. What is the solution to the following?

$$\begin{array}{r} 76 \\ \times 45 \\ \hline \end{array}$$

- A 310
 - B 684
 - C 3,420
 - D 3,440
2. Mr. Dern's students collected between 30 and 40 newspapers for recycling each week. Which of these could be the total number of newspapers Mr. Dern's students collected in 10 weeks?
- A 260
 - B 360
 - C 460
 - D 760

Go On 

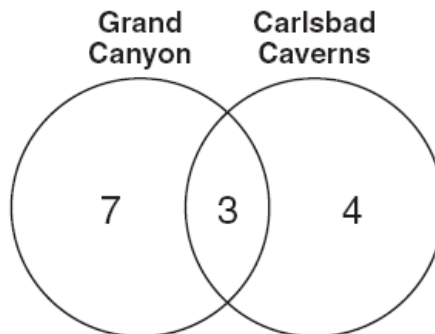
3. The chart below shows the choices Petra has for places to go on Saturday and the ways she can travel there.

Petra's Choices	
Place	Way of Travel
Park	Bicycle
Lake	Walk
	Skateboard

What is the total number of different combinations of 1 place and 1 way of travel that can be made?

- A 2
- B 5
- C 6
- D 9

4. The Venn diagram below shows the number of students in a class who have visited the Grand Canyon, Carlsbad Caverns, or both.

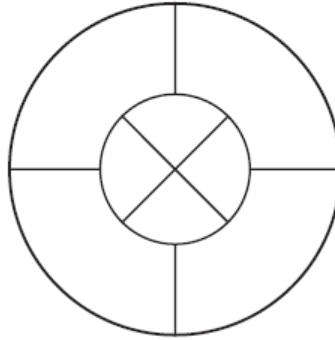


What is the total number of students who have visited the Grand Canyon?

- A 3
- B 7
- C 10
- D 14

Go On 

5. Sharon is making a piece of jewelry for her friend's birthday. She will place colored stones in a necklace following the pattern shown below.



Sharon does not want any stones of the same color to share a common edge. What is the **least** number of colors Sharon can use?

- A 3
 - B 4
 - C 5
 - D 6
6. What is the value of the following when $N = 8$?

$$23 \times N = ?$$

- A 31
- B 44
- C 164
- D 184

- 7.** Lindsay has eight more stickers than Whitney.

W represents the number of stickers Whitney has.

Which expression represents the number of stickers Lindsay has?

- A** $W - 8$
- B** $W + 8$
- C** $W \times 8$
- D** $W \div 8$

- 8.** Margaret left school at 3:40 p.m. She arrived home at the time shown on the clock below.



How long did it take Margaret to get home from school?

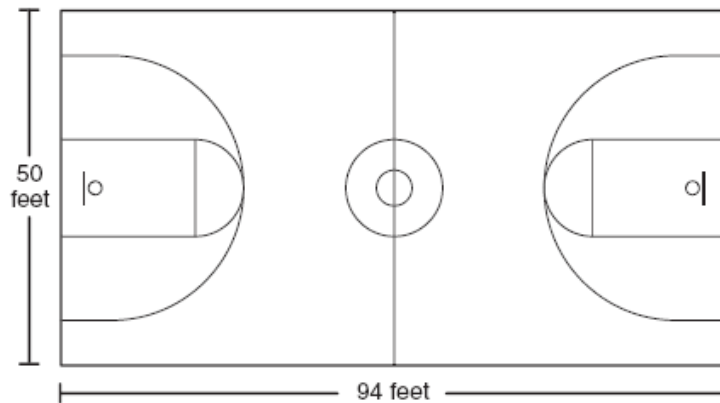
- A** 20 minutes
- B** 25 minutes
- C** 30 minutes
- D** 35 minutes

Go On 

9. During batting practice, Sammy hit a ball 63 feet and Kyle hit a ball 89 feet. How much farther did Kyle hit the ball than Sammy?

6 feet
6 feet
2 feet
2 feet

10. The basketball court pictured below is 94 feet long and 50 feet wide.



Which of the following represents the **perimeter** of the basketball court?

$0 + 94$
 0×94
 $0 + 2 + 94 + 2$
 $0 + 50 + 94 + 94$



AIMS Grade 4 Released Items

Item	Mathematics Item Data														
1	Item Number	3281940	Correct Answer	C	P-Value	.59	Equated Rasch Value	0.6495							
	2003 Mathematics Standard Alignment is Strand 1 – Concept 2 – Performance Objective 5														
	What is the solution to the following? <div><div>76</div><div>× 45</div></div> <div><div>A</div> 310<div>B</div> 684<div>C</div> 3,420<div>D</div> 3,440</div>														
2	Item Number	3281984	Correct Answer	B	P-Value	.43	Equated Rasch Value	1.4913							
	2003 Mathematics Standard Alignment is Strand 1 – Concept 3 – Performance Objective 1														
	Mr. Dern’s students collected between 30 and 40 newspapers for recycling each week. Which of these could be the total number of newspapers Mr. Dern’s students collected in 10 weeks? <div><div>A</div> 260<div>B</div> 360<div>C</div> 460<div>D</div> 760</div>														
3	Item Number	3308924	Correct Answer	C	P-Value	.48	Equated Rasch Value	1.1621							
	2003 Mathematics Standard Alignment is Strand 2 – Concept 3 – Performance Objective 1														
	The chart below shows the choices Petra has for places to go on Saturday and the ways she can travel there. <div><div>Petra’s Choices</div><table><tr><th>Place</th><th>Way of Travel</th></tr><tr><td>Park</td><td>Bicycle</td></tr><tr><td>Lake</td><td>Walk</td></tr><tr><td></td><td>Skateboard</td></tr></table><div>What is the total number of different combinations of 1 place and 1 way of travel that can be made?<div><div>A</div> 2<div>B</div> 5<div>C</div> 6<div>D</div> 9</div></div></div>								Place	Way of Travel	Park	Bicycle	Lake	Walk	
Place	Way of Travel														
Park	Bicycle														
Lake	Walk														
	Skateboard														

AIMS Grade 4 Released Items

4

Item Number	3282015	Correct Answer	C	P-Value	.42	Equated Rasch Value	1.3941
2003 Mathematics Standard Alignment is Strand 2 – Concept 1 – Performance Objective 4							

The Venn diagram below shows the number of students in a class who have visited the Grand Canyon, Carlsbad Caverns, or both.

A Venn diagram with two overlapping circles. The left circle is labeled 'Grand Canyon' and contains the number 7. The right circle is labeled 'Carlsbad Caverns' and contains the number 4. The intersection of the two circles contains the number 3.

What is the total number of students who have visited the Grand Canyon?

- A 3
- B 7
- C 10
- D 14

5

Item Number	3308933	Correct Answer	B	P-Value	.55	Equated Rasch Value	1.1021
2003 Mathematics Standard Alignment is Strand 2 – Concept 4 – Performance Objective 1							


Sharon is making a piece of jewelry for her friend's birthday. She will place colored stones in a necklace following the pattern shown below.

A circular necklace pattern diagram. It consists of an outer circle and an inner circle. The space between the circles is divided into four equal segments by a vertical line and a horizontal line. The inner circle is divided into four equal segments by two diagonal lines forming an 'X' shape.

Sharon does not want any stones of the same color to share a common edge. What is the least number of colors Sharon can use?

- A 3
- B 4
- C 5
- D 6

AIMS Grade 4 Released Items

6	Item Number	3308964	Correct Answer	D	P-Value	.56	Equated Rasch Value	0.5387	
	2003 Mathematics Standard Alignment is Strand 3 – Concept 3 – Performance Objective 1								
	What is the value of the following when $N = 8$?								
$23 \times N = ?$									
A 31									
B 44									
C 164									
D 184									
7	Item Number	3308966	Correct Answer	B	P-Value	.55	Equated Rasch Value	1.1516	
	2003 Mathematics Standard Alignment is Strand 3 – Concept 3 – Performance Objective 2								
	Lindsay has eight more stickers than Whitney.								
W represents the number of stickers Whitney has.									
Which expression represents the number of stickers Lindsay has?									
A $W - 8$									
B $W + 8$									
C $W \times 8$									
D $W \div 8$									
8	Item Number	3309009	Correct Answer	C	P-Value	.58	Equated Rasch Value	0.7396	
	2003 Mathematics Standard Alignment is Strand 4 – Concept 4 – Performance Objective 2								
	Margaret left school at 3:40 p.m. She arrived home at the time shown on the clock below.								
									
How long did it take Margaret to get home from school?									
A 20 minutes									
B 25 minutes									
C 30 minutes									
D 35 minutes									

AIMS Grade 4 Released Items

9

Item Number	3281938	Correct Answer	A	P-Value	.74	Equated Rasch Value	-0.0729
2003 Mathematics Standard Alignment is Strand 1 – Concept 2 – Performance Objective 4							

During batting practice, Sammy hit a ball 63 feet and Kyle hit a ball 89 feet. How much farther did Kyle hit the ball than Sammy?

A
B
C
D

10

Item Number	3309095	Correct Answer	D	P-Value	.58	Equated Rasch Value	0.8679
2003 Mathematics Standard Alignment is Strand 5 – Concept 1 – Performance Objective 2							

The basketball court pictured below is 94 feet long and 50 feet wide.

Which of the following represents the **perimeter** of the basketball court?

A $50 + 94$
B 50×94
C $50 + 2 + 94 + 2$
D $50 + 50 + 94 + 94$